

## MSTIDs statistical study using HF radar ground backscatter data

# Alexey Oinats[1]; Volodya Kurkin[1]; Nozomu Nishitani[2]; Oleg Bergardt[1]; K.G. Ratovsky[1]  
[1] Institute of Solar-Terrestrial Physics, Irkutsk, Russia; [2] STELAB, Nagoya Univ.

We present statistical characteristics of medium-scale traveling ionospheric disturbances (MSTIDs) revealed from the data of two mid-latitude SuperDARN HF radars: Hokkaido (43.53N, 143.61E) and Ekaterinburg (56.42N, 58.53E). An automatic technique based on the cross-correlation analysis of minimum group range variations is used for determination of the main MSTIDs parameters such as azimuth, apparent horizontal velocity, period and wavelength. Datasets collected by Hokkaido and Ekaterinburg radars cover a long period from the late 2006 until 2014 and during 2013 accordingly. This allows us to discuss diurnal and seasonal dependencies of predominant MSTIDs propagation direction as well as its solar and geomagnetic activity dependence. In addition, comparison of the results for two spatially separated radars allows us to study dependency of predominant MSTIDs propagation direction from geographic location.